



VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

[Sponsored by Lavu Educational Society]

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Computer Science and Engineering

II B. Tech I Semester

SUBJECT: Digital Electronics (CS301PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the fundamentals of semiconductor devices and their characteristics	2
CO2	Analyze and design basic analog circuits using diodes, transistors, and amplifiers	4
CO3	Apply Boolean algebra and logic simplification techniques to design digital circuits	3
CO4	Design combinational and sequential logic circuits for real-time applications	4
CO5	Demonstrate awareness of electronic system applications and communicate technical concepts effectively	1

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1	-	-	-	-	-	-	-	1	1	3	1
CO2	3	3	3	2	-	-	-	-	1	-	-	1	2	3	1
CO3	3	3	3	2	-	-	-	-	1	-	-	2	2	3	2
CO4	3	3	3	3	-	-	-	-	1	-	-	2	2	3	2
CO5	3	2	3	2	-	-	-	-	2	-	-	2	3	3	2
Average	3	2.6	2.8	2	-	-	-	-	1.3	-	-	1.6	2	3	1.6



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SUBJECT: Data Structures (CS302PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Ability to select the data structures that efficiently model the information in a problem.	3
CO2	Ability to assess efficiency trade-offs among different data structure implementations or combinations.	2
CO3	Implement and know the application of algorithms for sorting and pattern matching.	3
CO4	Design programs using a variety of data structures, including hash tables, binary and general tree structures, search trees, tries, heaps, graphs, and AVL-trees.	5
CO5	Demonstrate problem-solving skills and teamwork through programming assignments and projects	1

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	2	-	-	3	-	3	3	3	3	2
CO2	2	3	2	3	2	3	-	-	2	-	2	2	3	3	2
CO3	3	3	2	2	3	2	-	-	3	-	2	3	3	3	2
CO4	3	3	2	3	3	3	-	-	2	-	2	3	3	3	2
CO5	2	3	3	3	2	2	-	-	2	-	2	3	2	2	3
Average	2.6	2.8	2.4	2.8	2.4	2.4	-	-	2.4	-	2.2	2.8	2.8	2.8	2.2



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SUBJECT: Computer Oriented Statistical Methods (CS303PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Apply the concepts of probability and distributions to case studies.	3
CO2	Formulate and solve problems involving random variables and apply statistical methods for analyzing experimental data.	6
CO3	Apply concept of estimation and testing of hypothesis to case studies.	3
CO4	Correlate the concepts of one unit to the concepts in other units.	4
CO5	Implement statistical algorithms using computational tools and interpret results	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	-	-	-	-	-	-	3	3	3	-
CO2	3	3	3	3	3	-	-	-	-	-	-	3	3	3	-
CO3	3	3	-	-	-	-	-	-	-	-	-	2	3	2	-
CO4	3	3	2	2	-	-	-	-	-	-	-	3	3	2	-
CO5	3	3	2	2	-	-	-	-	-	-	-	3	3	3	-
Average	3	3	2.5	2.5	3	-	-	-	-	-	-	2.8	3	2.6	-



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SUBJECT: Computer Organization and Architecture (CS304PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand the basics of instruction sets and their impact on processor design.	2
CO2	Demonstrate an understanding of the design of the functional units of a digital computer system.	1
CO3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory.	5
CO4	Design a pipeline for consistent execution of instructions with minimum hazards.	6
CO5	Recognize and manipulate representations of numbers stored in digital computers	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	2	3	-	-	-	-	-	2	2	2	3	2
CO2	3	3	3	2	2	-	-	-	-	-	2	2	2	3	2
CO3	3	3	3	3	2	-	-	-	-	-	2	2	3	3	2
CO4	3	3	3	3	3	-	-	-	-	-	2	2	3	3	3
CO5	3	3	3	3	3	-	-	-	-	-	3	2	3	3	2
Average	3	2.8	2.8	2.6	2.6	-	-	-	-	-	2.2	2	2.6	3	2.2

SUBJECT: Object Oriented Programming Through Java (CS305PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Demonstrate the behavior of programs involving the basic programming constructs like control structures, constructors, string handling and garbage collection.	1
CO2	Demonstrate the implementation of inheritance (multilevel, hierarchical and multiple) by using extend and implement keywords	1
CO3	Use multithreading concepts to develop inter process communication.	3
CO4	Understand the process of graphical user interface design and implementation using AWT or swings.	2
CO5	Develop applets that interact abundantly with the client environment and deploy on the server.	6

MAPPING

[illegible]



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SUBJECT: Data Structures Lab (CS306PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Implement linear data structures such as arrays, stacks, and queues	3
CO2	Apply linked lists for dynamic memory management and manipulation	3
CO3	Develop programs using trees and graphs for hierarchical and networked data	6
CO4	Implement searching, sorting, and hashing techniques for efficient data access	4
CO5	Demonstrate teamwork, debugging, and documentation skills in lab assignments	1

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	2	-	-	3	-	2	2	3	3	2
CO2	3	3	3	3	2	2	-	-	2	-	3	2	3	3	2
CO3	3	3	3	3	2	2	-	-	2	-	3	3	3	3	2
CO4	3	3	3	3	3	2	-	-	2	-	2	3	3	3	2
CO5	3	3	3	3	3	3	-	-	3	-	2	3	3	3	3
Average	3	3	2.8	2.8	2.4	2.2	-	-	2.4	-	2.4	2.6	3	3	2.2



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SUBJECT: Object Oriented Programming Through Java Lab (CS307PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Apply object-oriented programming concepts using Java	3
CO2	Implement inheritance, polymorphism, and exception handling	2
CO3	Develop GUI applications using AWT and Swing	6
CO4	Use multithreading and file I/O for concurrent and persistent applications	3
CO5	Demonstrate teamwork, debugging, and documentation skills in Java projects	1

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	1	3	-	-	-	2	-	-	-	-	-	-
CO2	3	3	3	2	2	-	-	-	2	-	-	-	3	-	-
CO3	3	3	3	3	2	-	-	-	2	-	-	-	3	3	-
CO4	3	3	3	3	3	-	-	-	3	-	-	-	3	3	-
CO5	3	3	3	3	3	-	-	-	3	-	-	-	3	3	-
Average	3	2.8	2.8	2.4	2.6	-	-	-	2.4	-	-	-	3	3	-



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SUBJECT: Data Visualization - R Programming/ Power BI (CS308PC)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Understand How to import data into Tableau	2
CO2	Understand Tableau concepts of Dimensions and Measures.	2
CO3	Develop Programs and understand how to map Visual Layouts and Graphical Properties.	6
CO4	Create a Dashboard that links multiple visualizations.	6
CO5	Use graphical user interfaces to create Frames for providing solutions to real world problems.	3

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	2	-	-	3	-	2	2	3	3	2
CO2	3	3	3	3	2	2	-	-	2	-	3	2	3	3	2
CO3	3	3	3	3	2	2	-	-	2	-	3	3	3	3	2
CO4	3	3	3	3	3	2	-	-	2	-	2	3	3	3	2
CO5	3	3	3	3	3	3	-	-	3	-	2	3	3	3	3
Average	3	3	2.8	2.8	2.4	2.2	-	-	2.4	-	2.4	2.6	3	3	2.2



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SUBJECT: Gender Sensitization Lab (MC309)

At the end of the course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
CO1	Develop a better understanding of important issues related to gender in contemporary India.	1
CO2	Sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.	2
CO3	Attain a finer grasp of how gender discrimination works in our society and how to counter it.	3
CO4	Men and women students and professionals will be better equipped to work and live together as equals.	4
CO5	Through providing accounts of studies and movements as well as the new laws that provide protection and relief to women, the textbook will empower students to understand and respond to gender violence.	5

MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	2	2	3	-	2	-	3	-	-	2
CO2	-	-	-	-	-	2	3	3	-	2	-	3	-	-	2
CO3	-	-	-	-	-	3	2	3	-	2	-	3	-	-	3
CO4	-	-	-	-	-	3	2	3	-	3	-	3	-	-	2
CO5	-	-	-	-	-	3	2	3	-	3	-	3	-	-	3
Average	-	-	-	-	-	2.6	2.2	3	-	2.4	-	3	-	-	2.4